

#42

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	09/009,455		
		Filing Date	01/20/1998		
		First Named Inventor	Mills		
		Group Art Unit	1754		
		Examiner Name	Langel <i>TSANG-FOSTER</i>		
Sheet	1	of	4	Attorney Docket Number	

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
<i>AS</i>		R. Mills, P. Ray, B. Dhandapani, W. Good, P. Jansson, M. Nansteel, J. He, A. Voigt, "Spectroscopic and NMR Identification of Novel Hydride Ions in Fractional Quantum Energy States Formed by an Exothermic Reaction of Atomic Hydrogen with Certain Catalysts," J. Phys. Chem. A, submitted. (Web Publication Date: Feb. 21, 2003.) <b>Attachment 81</b> Internet publication date at <i>www.blacklightpower.com</i>	
<i>AS</i>		R. L. Mills, "The Fallacy of Feynman's Argument on the Stability of the Hydrogen Atom According to Quantum Mechanics, Physical Review," submitted. (Web Publication Date: Jan. 27, 2003.) <b>Attachment 80</b> Internet publication date at <i>www.blacklightpower.com</i>	
<i>AS</i>		R. Mills, J. He, B. Dhandapani, P. Ray, "Comparison of Catalysts and Microwave Plasma Sources of Vibrational Spectral Emission of Fractional-Rydberg-State Hydrogen Molecular Ion," Canadian Journal of Physics, submitted. <b>Attachment 79</b> (NO DATE)	
<i>AS</i>		R. L. Mills, P. Ray, J. Dong, M. Nansteel, B. Dhandapani, J. He, "Vibrational Spectral Emission of Fractional-Principal-Quantum-Energy-Level Molecular Hydrogen," Bulletin of the Chemical Society of Japan, submitted. (Web Publication Date: Sept. 9, 2002.) <b>Attachment 78</b> Internet publication date at <i>www.blacklightpower.com</i>	
<i>AS</i>		J. Phillips, R. L. Mills, X. Chen, "Water Bath Calorimetric Study of Excess Heat in 'Resonance Transfer' Plasmas," Journal of Applied Physics, submitted. <b>Attachment 77</b> (no date)	
<i>AS</i>		R. L. Mills, P. Ray, B. Dhandapani, X. Chen, "Comparison of Catalysts and Microwave Plasma Sources of Spectral Emission of Fractional-Principal-Quantum-Energy-Level Atomic and Molecular Hydrogen," Journal of Applied Spectroscopy, submitted. (Web Publication Date: Feb. 12, 2002.) <b>Attachment 76</b> Internet publication date at <i>www.blacklightpower.com</i>	
<i>AS</i>		R. L. Mills, P. Ray, B. Dhandapani, J. He, "Novel Liquid-Nitrogen-Condensable Molecular Hydrogen Gas," Polish Journal of Chemistry, submitted. (Web Publication Date: Oct. 29, 2002.) <b>Attachment 75</b> Internet publication date at <i>www.blacklightpower.com</i>	

Examiner Signature	<i>Ausy Lang Foster</i>	Date Considered	11/26/03
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AS		R. L. Mills, P. C. Ray, R. M. Mayo, M. Nansteel, B. Dhandapani, J. Phillips, "Spectroscopic Study of Unique Line Broadening and Inversion in Low Pressure Microwave Generated Water Plasmas," Physics of Plasmas, submitted. <b>Attachment 74</b> (no date)	
AS		R. L. Mills, P. Ray, B. Dhandapani, J. He, "Energetic Helium-Hydrogen Plasma Reaction," AIAA Journal, submitted. (Web Publication Date: July 26, 2002.) <b>Attachment 73</b> Internet publication date at <a href="http://www.blacklightpower.com">www.blacklightpower.com</a>	
AS		R. L. Mills, M. Nansteel, P. C. Ray, "Bright Hydrogen-Light and Power Source due to a Resonant Energy Transfer with Strontium and Argon Ions," Vacuum, submitted. <b>Attachment 72</b> (no date)	
AS		R. L. Mills, P. Ray, B. Dhandapani, J. Dong, X. Chen, "Power Source Based on Helium-Plasma Catalysis of Atomic Hydrogen to Fractional Rydberg States," J. Mol. Struct., submitted. <b>Attachment 71</b> (no date)	
AS		R. Mills, J. He, A. Echezuria, B Dhandapani, P. Ray, "Comparison of Catalysts and Plasma Sources of Vibrational Spectral Emission of Fractional-Rydberg-State Hydrogen Molecular Ion," European Journal of Physics D, submitted. (Web Publication Date: Sept. 2, 2002.) <b>Attachment 70</b> Internet publication date at <a href="http://www.blacklightpower.com">www.blacklightpower.com</a>	
AS		R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Spectroscopic Characterization of the Atomic Hydrogen Energies and Densities and Carbon Species During Helium-Hydrogen-Methane Plasma CVD Synthesis of Diamond Films," Chemistry of Materials, in press. (Web Publication Date: Dec. 31, 2002.) <b>Attachment 69</b> Internet publication date at <a href="http://www.blacklightpower.com">www.blacklightpower.com</a>	
AS		R. Mills, P. Ray, R. M. Mayo, "Stationary Inverted Balmer and Lyman Populations for a CW HI Water-Plasma Laser," IEEE Transactions on Plasma Science, submitted. (Web Publication Date: Aug. 16, 2002.) <b>Attachment 68</b> , Internet publication date at <a href="http://www.blacklightpower.com">www.blacklightpower.com</a>	

Examiner Signatur	<i>Prady Tsang Foster</i>	Date Considered	11/26/03
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AS		R. L. Mills, P. Ray, B. Dhandapani, J. He, "Extreme Ultraviolet Spectroscopy of Helium-Hydrogen Plasma," J. Phys. B, submitted. (Web Publication Date: July 17, 2002.) Attachment 67, Internet publication date at <u>www.blacklightpower.com</u>	
MS		R. L. Mills, P. Ray, "Spectroscopic Evidence for a Water-Plasma Laser," Europhysics Letters, submitted. (Web Publication Date: Sept. 19, 2002.) Attachment 66 Internet publication date at <u>www.blacklightpower.com</u>	
MS		R. Mills, P. Ray, R. M. Mayo, "Spectroscopic Evidence for CW H I Lasing in a Water-Plasma," J. of Applied Physics, submitted. (Web Publication Date: Sept. 18, 2002.) Attachment 65, Internet publication date at <u>www.blacklightpower.com</u>	
AS		R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Low Power MPCVD of Diamond Films on Silicon Substrates," Journal of Vacuum Science & Technology A, submitted. (Web Publication Date: June 26, 2002.) Attachment 64, Internet publication date at <u>www.blacklightpower.com</u>	
AS		R. L. Mills, X. Chen, P. Ray, J. He, B. Dhandapani, "Plasma Power Source Based on a Catalytic Reaction of Atomic Hydrogen Measured by Water Bath Calorimetry," Thermochemica Acta, submitted. (Web Publication Date: June 25, 2002.) Attachment 63, Internet publication date at <u>www.blacklightpower.com</u>	
AS		R. L. Mills, A. Voigt, B. Dhandapani, J. He, "Synthesis and Spectroscopic Identification of Lithium Chloro Hydride," Materials Characterization, submitted. Attachment 62 (no date)	
AS		R. L. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride," Solar Energy Materials & Solar Cells, in press. (Web Publication Date: April 15, 2002.) Attachment 61, Internet publication date at <u>www.blacklightpower.com</u>	

Examiner Signature	<i>Sung Tsang Foster</i>	Date Considered	11/26/03
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<i>AS</i>		R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Synthesis of HDLC Films from Solid Carbon," Thin Solid Films, submitted. (Web Publication Date: May 3, 2002.) Attachment 60, Internet publication date at <i>www.blacklightpower.com</i>	
<i>AS</i>		R. Mills, P. Ray, R. M. Mayo, "The Potential for a Hydrogen Water-Plasma Laser," Applied Physics Letters, in press. (Web Publication Date: July 11, 2002.) Attachment 59, Internet publication date at <i>www.blacklightpower.com</i>	
<i>AS</i>		R. L. Mills, "Classical Quantum Mechanics," Physics Essays, submitted. (Web Publication Date: May 23, 2002.) Attachment 58, Internet publication date at <i>www.blacklightpower.com</i>	
<i>AS</i>		R. L. Mills, P. Ray, "Spectroscopic Characterization of Stationary Inverted Lyman Populations and Free-Free and Bound-Free Emission of Lower-Energy State Hydride Ion Formed by a Catalytic Reaction of Atomic Hydrogen and Certain Group I Catalysts, Quantitative Spectroscopy and Radiative Transfer, in press. Attachment 57 (no date)	

Examiner Signature	<i>Amy Isany Foster</i>	Date Considered	<i>11/26/03</i>
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81. R. Mills, P. Ray, B. Dhandapani, W. Good, P. Jansson, M. Nansteel, J. He, A. Voigt, "Spectroscopic and NMR Identification of Novel Hydride Ions in Fractional Quantum Energy States Formed by an Exothermic Reaction of Atomic Hydrogen with Certain Catalysts," J. Phys. Chem. A, submitted. (*Web Publication Date: Feb. 21, 2003.*)
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66. R. L. Mills, P. Ray, "Spectroscopic Evidence for a Water-Plasma Laser," Europhysics Letters, submitted. (*Web Publication Date: Sept. 19, 2002.*)
65. R. Mills, P. Ray, R. M. Mayo, "Spectroscopic Evidence for CW H I Lasing in a Water-Plasma," J. of Applied Physics, submitted. (*Web Publication Date: Sept. 18, 2002.*)
64. R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Low Power MPCVD of Diamond Films on Silicon Substrates," Journal of Vacuum Science & Technology A, submitted. (*Web Publication Date: June 26, 2002.*)
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62. R. L. Mills, A. Voigt, B. Dhandapani, J. He, "Synthesis and Spectroscopic Identification of Lithium Chloro Hydride," Materials Characterization, submitted.
61. R. L. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride," Solar Energy Materials & Solar Cells; in press. (*Web Publication Date: April 15, 2002.*)
60. R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Synthesis of HDLC Films from Solid Carbon," Thin Solid Films, submitted. (*Web Publication Date: May 3, 2002.*)
59. R. Mills, P. Ray, R. M. Mayo, "The Potential for a Hydrogen Water-Plasma Laser,"

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57. R. L. Mills, P. Ray, "Spectroscopic Characterization of Stationary Inverted Lyman Populations and Free-Free and Bound-Free Emission of Lower-Energy State Hydride Ion Formed by a Catalytic Reaction of Atomic Hydrogen and Certain Group I Catalysts, Quantitative Spectroscopy and Radiative Transfer, in press.
56. R. M. Mayo, R. Mills, "Direct Plasmadynamic Conversion of Plasma Thermal Power to Electricity for Microdistributed Power Applications," 40th Annual Power Sources Conference, Cherry Hill, NJ, June 10-13, (2002), pp. 1-4. (*Web Publication Date: March 28, 2002.*)
55. R. Mills, P. Ray, R. M. Mayo, "Chemically-Generated Stationary Inverted Lyman Population for a CW HI Laser," European J of Phys. D, submitted. (*Web Publication Date: April 22, 2002.*)
54. R. L. Mills, P. Ray, "Stationary Inverted Lyman Population Formed from Incandescently Heated Hydrogen Gas with Certain Catalysts," J. Phys. D, Applied Physics, submitted. (*Web Publication Date: March 20, 2002.*)
53. R. Mills, "A Maxwellian Approach to Quantum Mechanics Explains the Nature of Free Electrons in Superfluid Helium," Foundations of Science, submitted. (*Web Publication Date: June 4, 2002.*)
52. R. Mills and M. Nansteel, P. Ray, "Bright Hydrogen-Light Source due to a Resonant Energy Transfer with Strontium and Argon Ions," New Journal of Physics, Vol. 4, (2002), pp. 70.1-70.28. (*Web Publication Date: October, 2002, when it became available on the New Journal of Physics website.*)
51. R. Mills, P. Ray, R. M. Mayo, "CW HI Laser Based on a Stationary Inverted Lyman Population Formed from Incandescently Heated Hydrogen Gas with Certain Group I Catalysts," IEEE Transactions on Plasma Science, in press. (*Web Publication Date: Feb. 4, 2002.*)
50. R. L. Mills, P. Ray, J. Dong, M. Nansteel, B. Dhandapani, J. He, "Spectral Emission of Fractional-Principal-Quantum-Energy-Level Atomic and Molecular Hydrogen," Vibrational Spectroscopy, in press.
49. R. L. Mills, P. Ray, E. Dayalan, B. Dhandapani, J. He, "Comparison of Excessive Balmer  $\alpha$  Line Broadening of Inductively and Capacitively Coupled RF, Microwave, and Glow Discharge Hydrogen Plasmas with Certain Catalysts," IEEE Transactions on Plasma Science, in press. (*Web Publication Date: Sept. 17, 2002.*)

48. R. M. Mayo, R. Mills, M. Nansteel, "Direct Plasmadynamic Conversion of Plasma Thermal Power to Electricity," IEEE Transactions on Plasma Science, October, (2002), Vol. 30, No. 5, pp. 2066-2073. (*Web Publication Date: March 26, 2002.*)
47. H. Conrads, R. Mills, Th. Wrubel, "Emission in the Deep Vacuum Ultraviolet from a Plasma Formed by Incandescently Heating Hydrogen Gas with Trace Amounts of Potassium Carbonate," Plasma Sources Science and Technology, submitted.
46. R. L. Mills, P. Ray, "Stationary Inverted Lyman Population and a Very Stable Novel Hydride Formed by a Catalytic Reaction of Atomic Hydrogen and Certain Catalysts," International Journal of Engineering Science, submitted.
45. R. L. Mills, J. He, P. Ray, B. Dhandapani, X. Chen, "Synthesis and Characterization of a Highly Stable Amorphous Silicon Hydride as the Product of a Catalytic Helium-Hydrogen Plasma Reaction," Int. J. Hydrogen Energy, in press. (*Web Publication Date: April 15, 2002.*)
44. R. L. Mills, A. Voigt, B. Dhandapani, J. He, "Synthesis and Characterization of Lithium Chloro Hydride," Int. J. Hydrogen Energy, submitted. (*Web Publication Date: Jan. 7, 2002.*)
43. R. L. Mills, P. Ray, "Substantial Changes in the Characteristics of a Microwave Plasma Due to Combining Argon and Hydrogen," New Journal of Physics, www.njp.org, Vol. 4, (2002), pp. 22.1-22.17. (*Web Publication Date: Dec. 27, 2001.*)
42. R. L. Mills, P. Ray, "A Comprehensive Study of Spectra of the Bound-Free Hyperfine Levels of Novel Hydride Ion  $H^-(1/2)$ , Hydrogen, Nitrogen, and Air," Int. J. Hydrogen Energy, in press. (*Web Publication Date: Nov. 14, 2001.*)
41. R. L. Mills, E. Dayalan, "Novel Alkali and Alkaline Earth Hydrides for High Voltage and High Energy Density Batteries," Proceedings of the 17<sup>th</sup> Annual Battery Conference on Applications and Advances, California State University, Long Beach, CA, (January 15-18, 2002), pp. 1-6. (*Web Publication Date: Nov. 9, 2001.*)
40. R. M. Mayo, R. Mills, M. Nansteel, "On the Potential of Direct and MHD Conversion of Power from a Novel Plasma Source to Electricity for Microdistributed Power Applications," IEEE Transactions on Plasma Science, August, (2002), Vol. 30, No. 4, pp. 1568-1578. (*Web Publication Date: Nov. 12, 2001.*)
39. R. Mills, P. C. Ray, R. M. Mayo, M. Nansteel, W. Good, P. Jansson, B. Dhandapani, J. He, "Stationary Inverted Lyman Populations and Free-Free and Bound-Free Emission of Lower-Energy State Hydride Ion Formed by an Exothermic Catalytic Reaction of Atomic Hydrogen and Certain Group I Catalysts," European Physical Journal-Applied Physics, submitted. (*Web Publication Date:*



Nov. 13, 2001.)

38. R. Mills, E. Dayalan, P. Ray, B. Dhandapani, J. He, "Highly Stable Novel Inorganic Hydrides from Aqueous Electrolysis and Plasma Electrolysis," *Electrochimica Acta*, Vol. 47, No. 24, (2002), pp. 3909-3926. (*Web Publication Date: June 13, 2002.*)
37. R. L. Mills, P. Ray, B. Dhandapani, R. M. Mayo, J. He, "Comparison of Excessive Balmer  $\alpha$  Line Broadening of Glow Discharge and Microwave Hydrogen Plasmas with Certain Catalysts," *J. of Applied Physics*, (2002), Vol. 92, No. 12, pp. 7008-7022. (*Web Publication Date: Oct. 9, 2002.*)
36. R. L. Mills, P. Ray, B. Dhandapani, J. He, "Emission Spectroscopic Identification of Fractional Rydberg States of Atomic Hydrogen Formed by a Catalytic Helium-Hydrogen Plasma Reaction," *Vacuum*, submitted. (*Web Publication Date: Oct. 9, 2001.*)
35. R. L. Mills, P. Ray, B. Dhandapani, M. Nansteel, X. Chen, J. He, "New Power Source from Fractional Rydberg States of Atomic Hydrogen," *Optics Communications*, submitted. (*Web Publication Date: Oct. 9, 2001.*)
34. R. L. Mills, P. Ray, B. Dhandapani, M. Nansteel, X. Chen, J. He, "Spectroscopic Identification of Transitions of Fractional Rydberg States of Atomic Hydrogen," *J. of Quantitative Spectroscopy and Radiative Transfer*, in press. (*Web Publication Date: Oct. 9, 2001.*)
33. R. L. Mills, P. Ray, B. Dhandapani, M. Nansteel, X. Chen, J. He, "New Power Source from Fractional Quantum Energy Levels of Atomic Hydrogen that Surpasses Internal Combustion," *J Mol. Struct.*, Vol. 643, No. 1-3, (2002), pp. 43-54. (*Web Publication Date: Oct. 10, 2001.*)
32. R. L. Mills, P. Ray, "Spectroscopic Identification of a Novel Catalytic Reaction of Rubidium Ion with Atomic Hydrogen and the Hydride Ion Product," *Int. J. Hydrogen Energy*, Vol. 27, No. 9, (2002), pp. 927-935. (*Web Publication Date: Sept. 19, 2001.*)
31. R. Mills, J. Dong, W. Good, P. Ray, J. He, B. Dhandapani, "Measurement of Energy Balances of Noble Gas-Hydrogen Discharge Plasmas Using Calvet Calorimetry," *Int. J. Hydrogen Energy*, Vol. 27, No. 9, (2002), pp. 967-978. (*Web Publication Date: Sept. 14, 2001.*)
30. R. L. Mills, A. Voigt, P. Ray, M. Nansteel, B. Dhandapani, "Measurement of Hydrogen Balmer Line Broadening and Thermal Power Balances of Noble Gas-Hydrogen Discharge Plasmas," *Int. J. Hydrogen Energy*, Vol. 27, No. 6, (2002), pp. 671-685. (*Web Publication Date: Aug. 22, 2001.*)
29. R. Mills, P. Ray, "Vibrational Spectral Emission of Fractional-Principal-Quantum-

- Energy-Level Hydrogen Molecular Ion," *Int. J. Hydrogen Energy*, Vol. 27, No. 5, (2002), pp. 533-564. (*Web Publication Date: July 19, 2001.*)
28. R. Mills, P. Ray, "Spectral Emission of Fractional Quantum Energy Levels of Atomic Hydrogen from a Helium-Hydrogen Plasma and the Implications for Dark Matter," *Int. J. Hydrogen Energy*, (2002), Vol. 27, No. 3, pp. 301-322. (*Web Publication Date: Aug. 1, 2001.*)
27. R. Mills, P. Ray, "Spectroscopic Identification of a Novel Catalytic Reaction of Potassium and Atomic Hydrogen and the Hydride Ion Product," *Int. J. Hydrogen Energy*, Vol. 27, No. 2, (2002), pp. 183-192. (*Web Publication Date: Jan. 11, 2002.*)
26. R. Mills, "BlackLight Power Technology-A New Clean Hydrogen Energy Source with the Potential for Direct Conversion to Electricity," *Proceedings of the National Hydrogen Association, 12 th Annual U.S. Hydrogen Meeting and Exposition, Hydrogen: The Common Thread*, The Washington Hilton and Towers, Washington DC, (March 6-8, 2001), pp. 671-697. (*Presented at the conference on March 7, 2001; Web Publication Date: April 20, 2001.*)
25. R. Mills, W. Good, A. Voigt, Jinqun Dong, "Minimum Heat of Formation of Potassium Iodo Hydride," *Int. J. Hydrogen Energy*, Vol. 26, No. 11, (2001), pp. 1199-1208. (*Web Publication Date: March 23, 2001.*)
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